AMENDMENTS TO THE CLAIMS

This Listing of Claims will replace all prior Listings, and versions, of claims in the present application.

Listing of Claims:

1. (Currently Amended) A biocompatible, human implantable apparatus, comprising:

a fully enclosed housing; ~~and~~

a circuit encased within a brick of epoxy, wherein the brick of epoxy containing the circuit is housed in said housing; and

a second epoxy disposed between an outer surface of the brick of epoxy and an inner surface of the fully enclosed housing.

2. (Original) The apparatus of claim 1, wherein the housing is a polymer housing and the polymer is an organic polymer.

3. (Original) The apparatus of claim 2, wherein the polymer housing comprises PMMA.

4. (Original) The apparatus of claim 2, wherein the polymer housing consists of PMMA.

5. (Original) The apparatus of claim 2, wherein the polymer housing consists essentially of PMMA.

6. (Original) The apparatus of claim 1, wherein at least part of the circuit is covered with an epoxy including a light blocking pigment.

7. (Original) The apparatus of claim 6, wherein the circuit comprises a substrate and a plurality of components attached to said substrate.

8. (Withdrawn) The apparatus of claim 1, further comprising a glass tube, wherein the epoxy brick containing the circuit is positioned within said glass tube and said glass tube is housed within said housing.

9. (Withdrawn) The apparatus of claim 8, wherein a glass ball is used to seal an open end of said glass tube.

10. (Withdrawn) The apparatus of claim 8, wherein an optical epoxy fills spaces between said glass tube and the inner wall of said housing.

11. (Withdrawn) The apparatus of claim 8, wherein an optical epoxy fills spaces between said circuit and the inner wall of said glass tube.

12. (Original) The apparatus of claim 1, wherein the housing is substantially cylindrical in shape and has an inner diameter.

13. (Withdrawn) The apparatus of claim 12, wherein the inner diameter of the polymer housing is equal or about equal to the square root of: $(w^2 + h^2)$, where w is the width of the epoxy brick and h is the height of the epoxy brick.

14. (Original) The apparatus of claim 1, wherein the housing does not comprise any glass.

15. (Withdrawn) A biocompatible, human implantable apparatus, comprising:

a fully enclosed housing;

a glass housing housed within said housing, the glass housing comprising a glass tube having an open end and a glass ball sealing said open end of said tube; and

a circuit housed within said glass housing.

16. (Withdrawn) The apparatus of claim 15, wherein the housing is a polymer housing and the polymer is an organic polymer.

17. (Withdrawn) The apparatus of claim 16, wherein the polymer housing comprises PMMA.

18. (Withdrawn) The apparatus of claim 16, wherein the polymer housing consists of PMMA.

19. (Withdrawn) The apparatus of claim 16, wherein the polymer housing consists essentially of PMMA.

20. (Withdrawn) The apparatus of claim 15, wherein at least part of the circuit is covered with an epoxy including a light blocking pigment.

21. (Withdrawn) The apparatus of claim 20, wherein the circuit comprises a substrate and a plurality of components attached to said substrate.

22. (Withdrawn) The apparatus of claim 15, further comprising optical epoxy, wherein the optical epoxy fills spaces between said glass housing and the inner wall of said housing.

23. (Withdrawn) The apparatus of claim 15, wherein an optical epoxy fills spaces between said circuit and the inner wall of said glass housing.

24. (Withdrawn) A method for fully encasing a circuit within a polymer housing, comprising:

placing the circuit in a mold;

injecting a formulation into the mold so that the formulation completely surrounds the circuit, wherein the formulation comprises monomers; and

polymerizing the monomers.

25. (Withdrawn) The method of claim 24, further comprising the step of covering the circuit with an epoxy prior to placing the circuit in the mold, wherein a sufficient amount of epoxy is used to cover the circuit so that the resulting surface topology is substantially smooth.

26. (Withdrawn) The method of claim 24, wherein the polymerization step is performed in a pressure vessel where the pressure is increased to at least about 125 psi using inert gas.

27. (Withdrawn) The method of claim 24, wherein the formulation comprises MMA monomers.

28. (Withdrawn) The method of claim 27, wherein the formulation further comprises pre-polymerized PMMA.

29. (Withdrawn) The method of claim 28, wherein the formulation comprises between 60% and 80% pre-polymerized PMMA by volume.

30. (Withdrawn) The method of claim 24, wherein the formulation consists essentially of MMA monomers.

31. (Withdrawn) The method of claim 24, wherein the formulation consists of MMA monomers.

32. (Withdrawn) A method for fully encasing a circuit within a housing, comprising:

inserting the circuit into the housing;

injecting an optical epoxy into the housing;

placing the housing containing the optical epoxy and the circuit into a pressure vessel;

increasing the pressure within the vessel;

increasing the temperature within the vessel;

allowing the optical epoxy to cure;

removing the housing from the pressure vessel; and

capping an open end of the housing.

33. (Withdrawn) The method of claim 32, wherein the housing comprises PMMA.

34. (Withdrawn) The method of claim 32, wherein the housing consists essentially of PMMA.

35. (Withdrawn) The method of claim 32, further comprising the step of encasing the circuit within an epoxy brick prior to placing the circuit in the housing.

36. (Withdrawn) The method of claim 32, wherein the pressure is increased to at least about 125 psi.

37. (Withdrawn) The method of claim 32, wherein the temperature is increased to about 40 degrees centigrade.

38. (Withdrawn) The method of claim 32, wherein the circuit is inserted into the housing after the optical epoxy is injected into the housing.

39. (Withdrawn) The method of claim 32, wherein the circuit is inserted into the housing before the optical epoxy is injected into the housing.

40. (Withdrawn) A method for fully encasing a circuit within a housing, comprising:

inserting the circuit into the glass housing;

injecting an optical epoxy into a glass housing;

injecting an optical epoxy into a second housing;

inserting into the second housing the glass housing containing the circuit;

capping an open end of the glass housing; and

capping an open end of the second housing.

41. (Withdrawn) The method of claim 40, wherein the second housing comprises PMMA.

42. (Withdrawn) The method of claim 40, wherein the second housing consists essentially of PMMA.

43. (Withdrawn) The method of claim 40, further comprising the step of encasing the circuit within an epoxy brick prior to placing the circuit in the glass housing.

44. (Withdrawn) The method of claim 40, wherein the circuit is inserted into the glass housing after the optical epoxy is injected into the glass housing.

45. (Withdrawn) The method of claim 40, wherein the circuit is inserted into the glass housing before the optical epoxy is injected into the glass housing.

46. (Withdrawn) The method of claim 40, wherein the step of capping an open end of the glass housing comprises the step of inserting a glass ball at least partially into said open end of the glass housing.

47. (Withdrawn) The method of claim 40, further comprising the step of curing the optical epoxy contained in the glass housing prior to inserting the glass housing into the second housing.

48. (Withdrawn) The method of claim 47, wherein the step of curing the optical epoxy comprises the step of placing the glass housing containing the optical epoxy and the circuit into a pressure vessel and increasing the temperature and pressure within the vessel.

49. (Withdrawn) The method of claim 40, further comprising the step of curing the optical epoxy contained in the glass housing after inserting the glass housing into the second housing.

50. (New) A biocompatible, human implantable apparatus, comprising:

a fully enclosed housing; and

a circuit encased within a brick of epoxy, wherein the brick of epoxy is comprised of a polymerized formulation of monomers and polymers, and said brick of epoxy containing the circuit is housed in said housing.